
ABRecord Reference

Data Management: Contact Data



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Contents

ABRecord Reference 5

Overview	5
Functions by Task	5
Getting Record Information	5
Managing Property Values	5
Functions	6
ABRecordCopyCompositeName	6
ABRecordCopyValue	6
ABRecordGetRecordID	7
ABRecordGetRecordType	7
ABRecordRemoveValue	8
ABRecordSetValue	8
Data Types	9
ABRecordRef	9
ABRecordID	9
ABPropertyID	9
ABRecordType	10
ABPropertyType	10
Constants	10
Record Types	10
Multivalue Properties	11
Record Property Types	11
Invalid Values	12

Document Revision History 15

ABRecord Reference

Derived From:	CTypeRef
Framework:	AddressBook/AddressBook.h
Declared in	ABRecord.h

Overview

The `ABRecord` opaque type (whose objects are known as **records**) provides a common interface to the records in the Address Book database. It defines common properties for all records. A **property** is a field in a record such as the first or last name of a person record.

Each record in the Address Book database has a unique ID, which you obtain using the [ABRecordGetRecordID](#) (page 7) function.

Functions by Task

Getting Record Information

- [ABRecordGetRecordID](#) (page 7)
Returns the unique ID of a record.
- [ABRecordGetRecordType](#) (page 7)
Returns the type of a record.

Managing Property Values

- [ABRecordSetValue](#) (page 8)
Sets the value of a record property.
- [ABRecordCopyValue](#) (page 6)
Returns the value of a record property.
- [ABRecordRemoveValue](#) (page 8)
Removes the value of a record property.
- [ABRecordCopyCompositeName](#) (page 6)
Returns an appropriate, human-friendly name for the record.

Functions

ABRecordCopyCompositeName

Returns an appropriate, human-friendly name for the record.

```
CFStringRef ABRecordCopyCompositeName (
    ABRecordRef record
);
```

Parameters

record

The record whose name is being returned.

Return Value

- For person records: The concatenated value of these properties: Prefix, Suffix, Organization, First name, and Last name.
- For group records: The value of the group name property (`kABGroupNameProperty`).

Discussion

The behavior of this function is not defined for source records.

Availability

Available in iOS 2.0 and later.

Declared In

ABRecord.h

ABRecordCopyValue

Returns the value of a record property.

```
CTypeRef ABRecordCopyValue (
    ABRecordRef record,
    ABPropertyID property
);
```

Parameters

record

The record containing the property in question.

property

The property of *record* whose value is being returned. See properties in “Constants” in *ABPerson Reference* and “Constants” in *ABGroup Reference*.

Return Value

The value of *property* in *record*.

Availability

Available in iOS 2.0 and later.

Declared In

ABRecord.h

ABRecordGetRecordID

Returns the unique ID of a record.

```
ABRecordID ABRecordGetRecordID (  
    ABRecordRef record  
);
```

Parameters

record

The record whose ID is being returned.

Return Value

The unique ID of *record* when the record exists in the Address Book database.

[kABRecordInvalidID](#) (page 13) when the record hasn't been saved to the database.

Availability

Available in iOS 2.0 and later.

Declared In

ABRecord.h

ABRecordGetRecordType

Returns the type of a record.

```
ABRecordType ABRecordGetRecordType (  
    ABRecordRef record  
);
```

Parameters

record

The record whose type is being returned.

Return Value

The record type of *record*, which can be one of these:

- `kABPersonType` for person records
- `kABGroupType` for group records.
- `kABSourceType` for source records.

Availability

Available in iOS 2.0 and later.

See Also

`ABPersonCreate`

`ABGroupCreate`

Declared In

ABRecord.h

ABRecordRemoveValue

Removes the value of a record property.

```
bool ABRecordRemoveValue (
    ABRecordRef record,
    ABPropertyID property,
    CFErrorRef *error
);
```

Parameters

record

The record with the property in question.

property

The property, in *record*, whose value is being removed. See properties in “Constants” in *ABPerson Reference* and “Constants” in *ABGroup Reference*.

error

On failure, information about its cause.

Return Value

true on success, false otherwise.

Availability

Available in iOS 2.0 and later.

Declared In

ABRecord.h

ABRecordSetValue

Sets the value of a record property.

```
bool ABRecordSetValue (
    ABRecordRef record,
    ABPropertyID property,
    CFTyperef value,
    CFErrorRef *error
);
```

Parameters

record

The record containing the property in question.

property

The property whose value is being set. See properties in “Constants” in *ABPerson Reference* and “Constants” in *ABGroup Reference*.

value

The new value. Pass NULL to remove the property from *record*.

error

On failure, information about its cause.

Return Value

true when successful, false otherwise.

Availability

Available in iOS 2.0 and later.

Declared In

ABRecord.h

Data Types

ABRecordRef

Reference to a record.

```
typedef CTypeRef ABRecordRef;
```

Availability

Available in iOS 2.0 and later.

Declared In

ABRecord.h

ABRecordID

Integer that identifies a record.

```
typedef int32_t ABRecordID;
```

Discussion

Valid record IDs are positive integers.

See “[Invalid Record ID](#)” (page 12).

Availability

Available in iOS 2.0 and later.

Declared In

ABRecord.h

ABPropertyID

Integer that identifies a record property.

```
typedef int32_t ABPropertyID;
```

Discussion

See properties listed in “Constants” in *ABPerson Reference* and “Constants” in *ABGroup Reference*

Availability

Available in iOS 2.0 and later.

Declared In

ABRecord.h

ABRecordType

Integer that identifies a record type.

```
typedef uint32_t ABRecordType;
```

Discussion

See [“Record Types”](#) (page 10).

Availability

Available in iOS 2.0 and later.

Declared In

ABRecord.h

ABPropertyType

Integer that identifies a record property type.

```
typedef uint16_t ABPropertyType;
```

Discussion

See [“Record Property Types”](#) (page 11).

Availability

Available in iOS 2.0 and later.

Declared In

ABRecord.h

Constants

Record Types

These constants identify record types.

```
enum {
    kABPersonType = 0,
    kABGroupType = 1
};
```

Constants

kABPersonType

Person record.

Available in iOS 2.0 and later.

Declared in ABRecord.h.

kABGroupType

Group record.

Available in iOS 2.0 and later.

Declared in ABRecord.h.

Discussion

See [ABRecordType](#) (page 10).

Multivalue Properties

Indicates a multivalue property.

```
#define kABMultiValueMask (1 << 8)
```

Constants

`kABMultiValueMask`
Indicates a multivalue property.
 Available in iOS 2.0 and later.
 Declared in `ABRecord.h`.

Record Property Types

These constants identify record property types.

```
enum {
    kABInvalidPropertyType           = 0x0,
    kABStringPropertyType           = 0x1,
    kABIntegerPropertyType          = 0x2,
    kABRealPropertyType             = 0x3,
    kABDateTimePropertyType         = 0x4,
    kABDictionaryPropertyType       = 0x5,
    kABMultiStringPropertyType      = kABMultiValueMask | kABStringPropertyType
    kABMultiIntegerPropertyType     = kABMultiValueMask | kABIntegerPropertyType
    kABMultiRealPropertyType        = kABMultiValueMask | kABRealPropertyType
    kABMultiDateTimePropertyType    = kABMultiValueMask | kABDateTimePropertyType
    kABMultiDictionaryPropertyType  = kABMultiValueMask | kABDictionaryPropertyType
};
```

Constants

`kABInvalidPropertyType`
Invalid property.
 Available in iOS 2.0 and later.
 Declared in `ABRecord.h`.

`kABStringPropertyType`
String property. Returned as a `CFStringRef` object.
 Available in iOS 2.0 and later.
 Declared in `ABRecord.h`.

`kABIntegerPropertyType`
Integer property. Returned as a `CFNumberRef` object.
 Available in iOS 2.0 and later.
 Declared in `ABRecord.h`.

`kABRealPropertyType`

Real property. Returned as a `CFNumberRef` object.

Available in iOS 2.0 and later.

Declared in `ABRecord.h`.

`kABDateTimePropertyType`

Date-time property. Returned as a `CFDateRef` object.

Available in iOS 2.0 and later.

Declared in `ABRecord.h`.

`kABDictionaryPropertyType`

Dictionary property. Returned as a `CFDictionaryRef` object.

Available in iOS 2.0 and later.

Declared in `ABRecord.h`.

`kABMultiStringPropertyType`

Multistring property. Returned as an `ABMultiValueIdentifier` of `CFStringRef` objects.

Available in iOS 2.0 and later.

Declared in `ABRecord.h`.

`kABMultiIntegerPropertyType`

Multiinteger property. Returned as an `ABMultiValueIdentifier` of `CFNumberRef` objects.

Available in iOS 2.0 and later.

Declared in `ABRecord.h`.

`kABMultiRealPropertyType`

Multireal property. Returned as an `ABMultiValueIdentifier` of `CFNumberRef` objects.

Available in iOS 2.0 and later.

Declared in `ABRecord.h`.

`kABMultiDateTimePropertyType`

Multi-date-time property. Returned as an `ABMultiValueIdentifier` of `CFDateRef` objects.

Available in iOS 2.0 and later.

Declared in `ABRecord.h`.

`kABMultiDictionaryPropertyType`

Multidictionary property. Returned as an `ABMultiValueIdentifier` of `CFDictionaryRef` objects.

Available in iOS 2.0 and later.

Declared in `ABRecord.h`.

Discussion

See [ABPropertyType](#) (page 10).

Invalid Values

These macros identify invalid values for record and property identifiers.

```
#define KABRecordInvalidID -1  
#define KABPropertyInvalidID -1
```

Constants

`KABRecordInvalidID`

Records with this ID have not been saved to the Address Book database.

Available in iOS 2.0 and later.

Declared in `ABRecord.h`.

`KABPropertyInvalidID`

Indicates an invalid value for a property ID.

Available in iOS 3.0 and later.

Declared in `ABRecord.h`.

Document Revision History

This table describes the changes to *ABRecord Reference*.

Date	Notes
2010-05-18	Updated for iOS 4.0 with new functions to support multiple sources.
2009-05-27	Added <code>kABPropertyInvalidID</code> . Removed preliminary document boilerplate.
2008-10-15	Added cross references. Added companion document.
2008-05-21	New document that describes an Address Book record.

REVISION HISTORY

Document Revision History